# SCOPE OF SERVICES FOR DESIGN SERVICES – QUESTIONS & ANSWERS

Design Services on M-43 from Rosemary Street to Coolidge Road, Lansing TSC, JN 100215C

Question 1: The RFP states "MDOT has prepared a preliminary log of project, typical cross sections and quantities for the CPM road work." Is the preliminary log available for review?

Answer 1: The preliminary log and cost summary are available for review. A copy is attached.

# MICHIGAN DEPARTMENT OF TRANSPORTATION

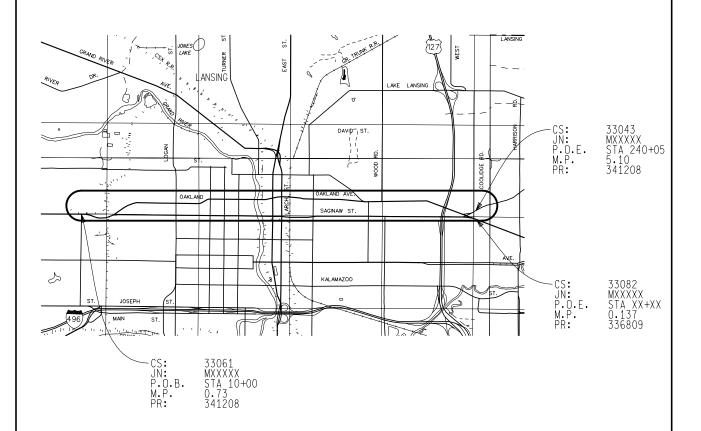
MICHIGAN PROJECT

CONTROL SECTION 33061, 33042, 33043, & 33082

JOB NUMBER MXXXXXX
M-43 EB (SAGINAW ST)
INGHAM COUNTY
CITY OF LANSING

TRAFFIC

ADT 24900
DHV 2538
COMM. % 5 %
DESIGN SPEED 50 MPH



CONTRACT FOR: 4.51 MI. OF COLD MILLING AND HMA

RESURFACING

THE IMPROVEMENTS COVERED BY THESE
PLANS SHALL BE DONE IN ACCORDANCE
WITH THE MICHIGAN DEPARTMENT OF
TRANSPORTATION 2003 STANDARD
SPECIFICATIONS FOR CONSTRUCTION

RECOMMEND FOR APPROVA	<u>4</u> L	KIRK STEUDLE - DIRECTOR  Michigan Department of Transportation  APPROVED	
		ENGINEER OF DEVELOPMENT DATE	
PROJECT MANAGER	DATE	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
DELIVERY ENGINEER	DATE	APPROVED DESIGN UNIT	

### **LOG OF PROJECT**

### CONTROL SECTION 33061, 33042, 33043, 33082 - JOB NUMBER M6XXXX

### **PROJECT LIMITS**

This project is located on M-43 (Eastbound Saginaw Street and Westbound Oakland Avenue) in the cities of Lansing and East Lansing within Ingham County. The project begins 275 feet west of the intersection of Rosemary Street (M.P. 0.78 of C.S. 33061), where the pavement changes from HMA to concrete, and continues easterly to the point of ending at the eastern spring points of Coolidge Road (M.P. 0.09 of C.S. 33043 and M.P. 0.15 of C.S. 33082). The total length of the project is 8.85 miles.

### **GENERAL DESCRIPTION OF WORK**

The work consists of cold milling the existing HMA lanes and approaches and resurfacing with hot mix asphalt as well as performing Detail 7 and Detail 8 joint and crack repairs to the lanes as directed by the Engineer. The work shall also include concrete pavement repairs to the existing concrete pavement as directed by the Engineer and placing permanent pavement markings.

All bridge decks and concrete approaches shall be excluded from the cold mill and resurfacing work. Also to be excluded is approximately 2200' of Westbound M-43 (Oakland Avenue) from the western spring point of Ballard Street to the eastern spring point of Clark Street.

Traffic shall be maintained in accordance with the Special Provision for Maintaining Traffic and as directed by the Engineer.

The work described shall be completed in accordance with the Michigan Department of Transportation 2003 Standard Specifications for Construction and the supplemental specifications and special provisions contained in this proposal.

### **JOINT & CRACK REPAIR WORK**

The intent of the joint and crack repair work is to repair only those transverse joints that are heaved or have evidence of heaving. The locations and limits of the repairs will be as directed by the Engineer.

Prior to resurfacing where the Engineer determines that excessive voids exist which would adversely affect the quality of the paving operations, HMA material, paid for as Hand Patching, shall be placed in the voids and compacted as directed by the Engineer. If the Engineer determines that the pavement cleaning operations will not, or did not, sufficiently remove loose or deteriorated material from existing joints and cracks, Detail 7 (partial depth) and Detail 8 (full depth) repairs shall be constructed according to Subsection 502.03 of the 2003 Standard Specifications for Construction where directed

by the Engineer. It is not the intent of this contract to repair all joints and cracks, only those which the Engineer determines would adversely affect the quality of the paving operations.

If the Contractor elects to complete the Detail 7 or Detail 8 repairs prior to cold milling, all incidental costs including deduction for hand patching material removed by cold milling, as well as secondary cleaning shall be considered included in the Detail 7 or Detail 8 pay item with respect to the joint in question.

### **COLD MILLING**

Cold mill the existing HMA lanes and HMA approaches to a uniform depth of 1½ inches as shown on the typical cross section and details contained in this log and as directed by the Engineer.

In locations where the existing HMA covers the gutter pan of the curb and gutter, removal of this will be paid for as Cold Milling HMA Surface.

At the location where Grand River breaks off from M-43 Westbound (Oakland Avenue), mill up to the curb nose in the M-43 Westbound right turn only lane.

At the north Fairview Avenue approach on M-43 Westbound (Oakland Avenue) cold mill and resurface back approximately 150'. Go far enough to remove the pavement markings delineating the right turn only lane and the thru or right turn lane. After this is resurfaced, designate the southbound Fairview right lane to be a right turn only lane. Designate the other southbound Fairview lane to be a thru only lane. Place the pavement markings according to the VIII-900 series of pavement marking typicals. The existing R3-8R sign (located approximately 45' north of the M-43 EOP on the west side of Fairview Avenue) must be removed and replaced with a R3-7f (36" X 30") sign. Retain the existing post and the existing R6-1R (one way) signs.

### **ADJUSTING MONUMENT BOXES**

Protect all government corners on this project according the attached Special Provision for The Preservation and Perpetuation of Public Land Survey Corners, Property Controlling Corners, Alignment Control Points and Horizontal Control Points. It is the intent that all government corners on this project be preserved and that, where necessary, monument boxes be placed or adjusted whether shown or not. Adjust monument boxes as directed by the Engineer.

### **HOT MIX ASPHALT RESURFACING**

Prior to the resurfacing operations, the pavement surface is to be cleaned in accordance with Subsection 502.03.C.2 of the 2003 Standard Specifications for Construction, including "routine blowing with compressed air, of the joints and cracks to remove loose material." This work is included in the pay item of Pavt, Cleaning.

Resurface the cold milled lanes with HMA, 5E10, High Stress at a rate of 165 lb/syd as shown on the typical cross section and details contained in this log.

The cold milled road approaches shall be resurfaced with HMA, 5E10 High Stress at a rate of 165 lb/syd and will be paid for as HMA Approach, High Stress.

In locations where the existing HMA covers the gutter pan of the curb and gutter, the HMA should be replaced in the same locations unless otherwise directed by the Engineer.

### **CONCRETE PAVEMENT RESTORATION**

Concrete pavement repairs shall be made on the existing concrete sections of the project. All full depth concrete repairs shall be constructed using Type P-NC concrete. All joints shall be placed as directed by the Engineer. A concrete patch log has been included in this proposal for information only. Exact locations of concrete repairs shall be as directed by the Engineer. Any structures that exist in concrete patches shall be adjusted as necessary and paid for as Dr Structure Cover, Adj, Case 1.

### PERMANENT PAVEMENT MARKINGS

The intent on this project is to replace the existing roadway pavement markings with new permanent pavement markings in the same location that they existed prior to the work called for in this log (except as noted at the north Fairview Avenue approach on Westbound M-43). The Contractor is responsible for documenting the location of the existing pavement markings and forwarding a copy of the log to the Engineer prior to beginning work.

### **GENERAL PLAN NOTES**

### **UNDERGROUND UTILITIES**

For protection of underground utilities and in conformance with public act 53, 1974, the contractor shall dial 1-800-482-7171 a minimum of three full working days, excluding Saturdays, Sundays, and holidays prior to beginning each excavation in areas where public utilities have not been previously located. Members will thus be routinely notified. This does not relieve the contractor of the responsibility of notifying utility owners who may not be a part of the "miss dig" alert system.

MDOT's freeway lighting system and other miscellaneous electrical systems are not a part of miss dig. Therefore, contractors shall contact the maintenance representative at the MDOT Region/TSC office to have MDOT electrical systems staked.

### **ADJUSTING MONUMENT BOXES**

All government corners on this project shall be preserved, whether shown or not. It may be necessary to place or adjust monument boxes, as required.

### **STATIONING**

Stationing on westbound M-43 (Oakland) was taken from old plans. Stationing on eastbound M-43 (Saginaw) was created specifically for this job. So, the POB and POE for eastbound and westbound traffic is different. The stationing may not be necessarily accurate.

### **PAVEMENT MARKINGS**

All permanent pavement markings, shapes, and dimensions shall conform with MDOT pavement marking typicals VIII-900 thru 990 series unless specified by special provision. All edge lines shall be 6 inches and all gore markings shall be 12 inches. Offsets from construction joints shall remain as noted in the pavement marking typicals.

### PERMANENT SIGNS

Any permanent signs requiring relocation due to contractor operations shall be salvaged and reset by the contractor at locations designated by the engineer. Signs and posts damaged during the removal and storage operations shall be replaced with new signs and posts. The cost of this work shall be borne by the contractor.

### **OLD PLANS**

The following old road plans were referred to in the design of this project

NH 33042-46707 NH 33061-38015 NH 33061, 33042 -36531 NH 33061-31062 33042 - 26776 33042, 33043 - 23904

In addition, other old road plans that predate this project may be available. These plans may be reviewed in the Transportation Service Center during normal working hours.

### RECREATIONAL PROPERTIES

The contractor shall not park any vehicles or store any equipment on any public recreational property. Access to the recreational site must be maintained at all times.

## NOTES APPLYING TO STANDARD PLANS

Where the following items are called for, they are to be constructed according to the standard plan or detail given below; opposite each item unless otherwise indicated.

<u>l itle</u>	Standard Plan No.
Concrete Pavement Repair	R - 44 – E
Monument Boxes	R – 11 - D
Temporary Traffic Control Devices	WZD-125-D
Ground Driven Sign Supports for Temp. Signs	WZD-100-A*

<sup>\*</sup>Denotes Special Detail

### Utilities in CS 33061, 33042, 33043, 33082

Electric

Gas

**Consumers Energy - Electric Transmission** 

Attention: Richard Cottrell, PE 1945 West Parnell Road, P12-208A

Jackson, Michigan 49201

(517) 788-0817

rgcottrell@cmsenergy.com

**Consumers Energy - Gas Transmission** 

Attention: Timothy Coppernoll 1945 West Parnell Road, P23-228

Jackson, Michigan 49201

(517) 788-0998

tjcoppernoll@cmsenergy.com

Consumers Energy Gas & Electric

Attention: Curtis Fatter 530 West Willow St. PO Box 30162

Lansing, MI 48909

Millennium Digital Media CATV

Attention: James Scott 2512 Lansing Road Charlotte, Michigan 48813

(517) 319-3158

Lansing Board of Water & Light Electric

Attention: Jan Simpson Engineering Planning Division P.O. Box 13007 Lansing, Michigan 48901-3007

**Detroit Edison Company**Electric

Attention: Barbara Archer-Fries, Facilitator Project Management 2000 2nd Avenue, Room 565 SB Detroit, Michigan 48226-1279

(313) 235-9433

at&t (SBC) Telecom Attention: Brian Crum Lansing Engineering Office 337 N. Abbott, Room 2 East Lansing, Michigan 48823 (517) 337-3610 **Verizon Communications** Telecom Attention: Manager, Access Design & Construction 860 Terrace Street Muskegon, Michigan 49440 **Waypoint Fiber Networks** Telecom Attention: Pete Empie 124 W. Allegan, Suite 1120 Lansing, Michigan 48933 (517) 381-2313 **Ingham County Drain Commissioner** Co drain Attention: Patrick Lindemann Po Box 220 707 Buhl Mason, Michigan 48854-0220 **Ingham County Road Commission** Storm Attention: Robert Peterson 301 Bush Street P.O. Box 38 Mason, Michigan 48854-0038 (231) 727-1385 Comcast – West Michigan **CATV** Attention: John Zimelis, Construction Supervisor 1401 E. Miller Road Lansing, Michigan 48911 (517) 394-9181

MCI WorldCom

Telecom

Attention: Investigations Department 42864/107 2400 North Glenville Richardson, TX 75082 (972) 729-6016 Fax: (972) 729-6240 **Arialink Telecom** Fiber Optic Attention: Jason Schreiber 1223 Turner Street, Suite A Lansing, Michigan 48906 **Bath Charter Township** Other Attention: Mark Ritter P.O.Box 247 Bath, Michigan 48808-0247 (517)641-6728 Other City of Lansing Attn: Dean Johnson 124 W. Michigan Ave Lansing, MI 48933-1694 (517)483-4000 **DIT Telecom** Fiber Attention: David Pierce 1<sup>st</sup> Floor, Hannah Building 608 West Allegan Street Lansing, MI 48909 517-241-9133 Fiber Sprint/Nextel Attn: Rick Sputa 27755 Stansbury Blvd. Farmington Hills, MI 48334 810-217-0055 Fiber **Sparrow Health System** Attn:Robert Zenz bob@protech-cabling.com 989-386-3722 Telecom McLeod USA 1295 S. Linden Road

Other

City of East Lansing
Atten: Public works

Flint, Michigan 48532 (810) 244-3500 ext. 1009

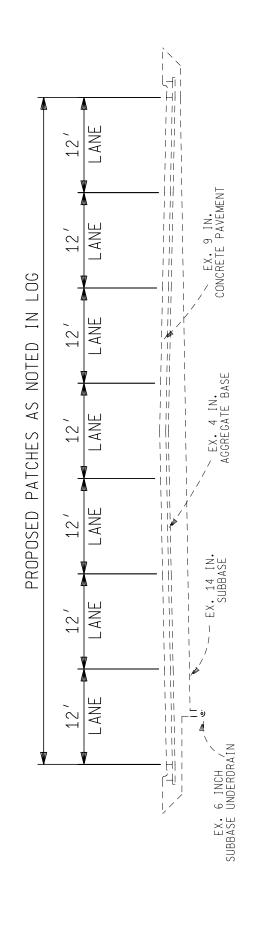
410 Abbott Rd. E. Lansing , MI 48823-3388

(517)337-1731

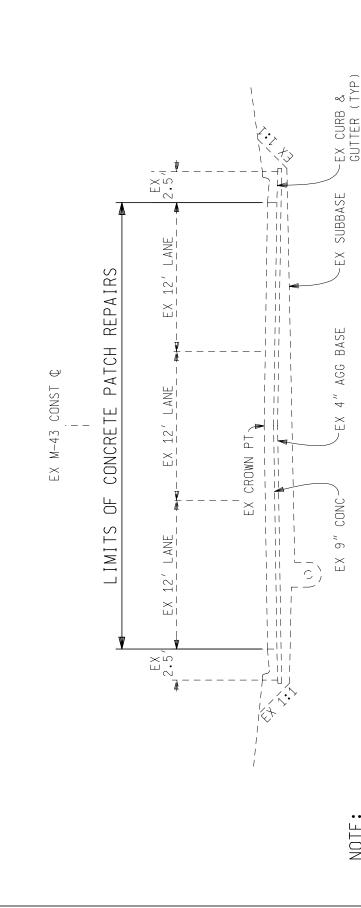
Michigan Electric Transmission Company Attention: James W. Smith 540 Avis Drive, Suite H Ann Arbor, MI 48108 (734) 929-1232 Fax: 734-929-1212

Electric

LAST CORRECTION BY: MCW



DATE SCALE CONT. SEC. JOB NO. SHEET NO. 33061



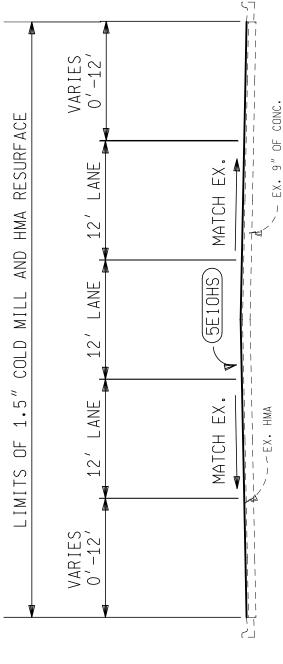
ON THE TYPICALS CONTAINED
IN THIS PROPOSAL WHERE
STREET NAMES ARE GIVEN
ALONG WITH STATIONING,
THE STREET NAMES ARE
GIVEN ONLY TO HELP CONVEY
THE GENERAL AREA WHERE
EACH TYPICAL APPLIES

SECTION APPLIES TO:
 M-43 EB (SAGINAW)
 STA 13+60 TO STA 36+37
 ROSEMARY ST TO STANLEY ST
 M-43 WB (OAKLAND)
 STA 158+46 TO STA 247+77
 ROSEMARY TO CAPITOL
 STA 276+40 TO STA 287+73

276+40 TO STA 287+73 LARCH TO BALLARD

DATE SCALE CONT. SEC. JOB NO. SHEET NO. 33061 M6XXXX

DATE: 04/18/07



SECTION APPLIES TO: M-43 WB (OAKLAND)

STA 247+77 TO STA 258+12 CAPITOL TO GR. RIVER BRIDGE

STA 260+92 TO STA 276+40 GR. RIVER BRIDGE TO LARCH

STA 287+73 TO STA 368+43 CLARK TO HOWARD STA 369+75 TO STA 379+93

HOMER TO CLIPPERT

HMA APPLICATION ESTIMATE

NOTES: - MILL AND RESURFACE TO THE CURB NOSE WHERE GRAND RIVER BREAKS OFF OF OAKLAND - GORE AREAS SHALL BE MILLED AND RESURFACED

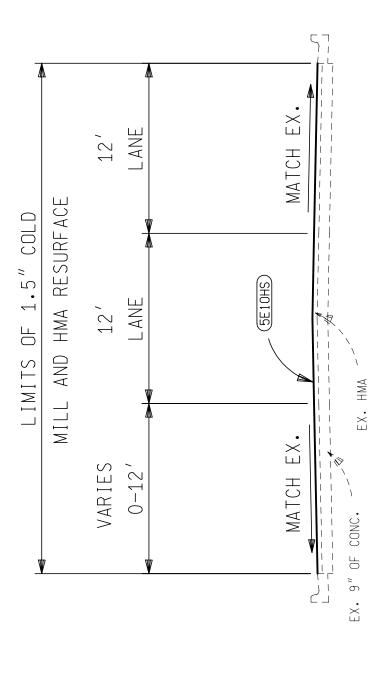
IDENT NO.	ITEM	RATE PER SYD	PERFORMANCE GRADE	REMARKS
5E10HS	5E10HS HMA 5E10, HIGH STRESS	165 LB	70-28P	TOP COURSE, AWI = 260
H H	HAND PATCHING	VARIES	70-28P	USE HMA, 5E10HS
	* BOND COAT	0.05-0.15 GAL		

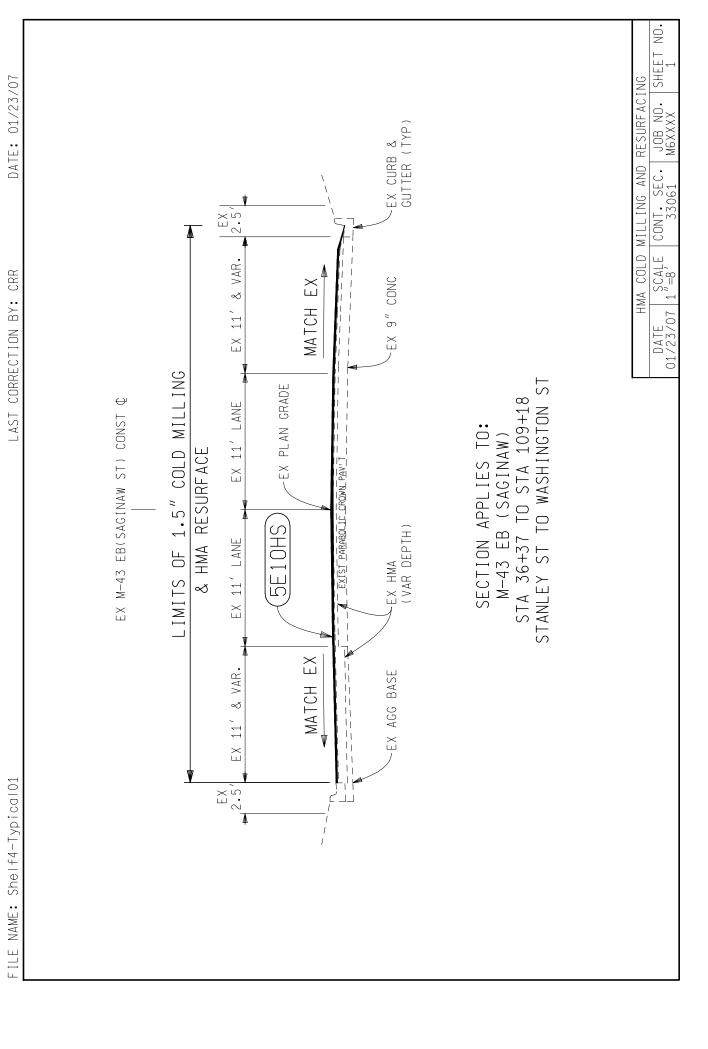
\*FOR INFORMATION ONLY

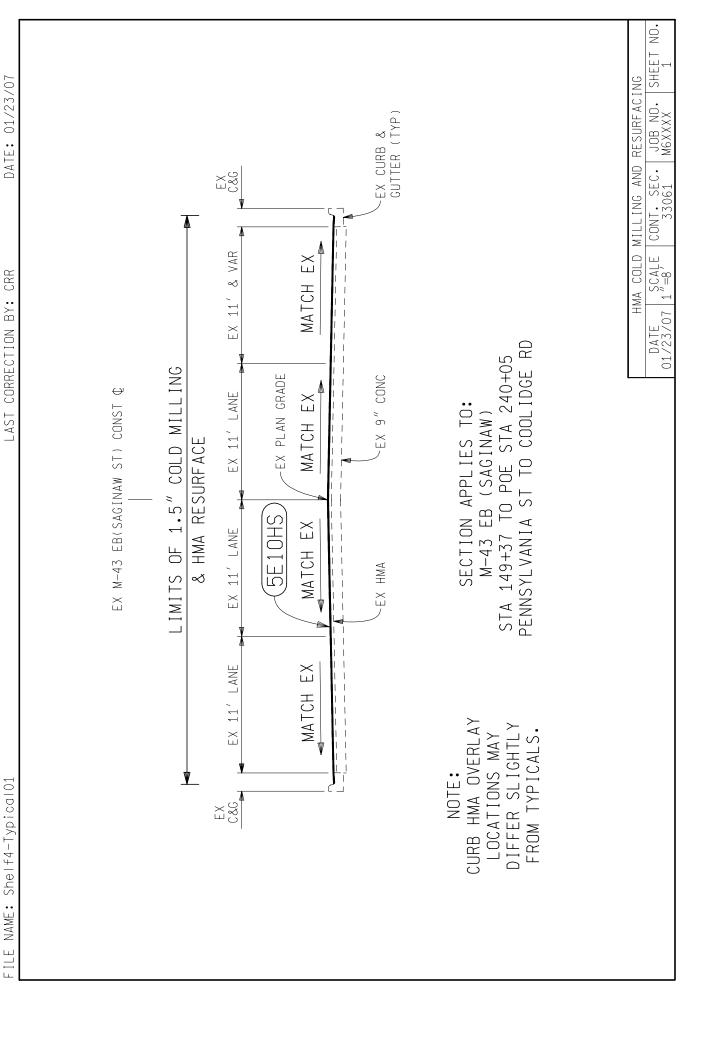
DATE SCALE CONT. SEC. JOB NO. SHEET NO. 33042.

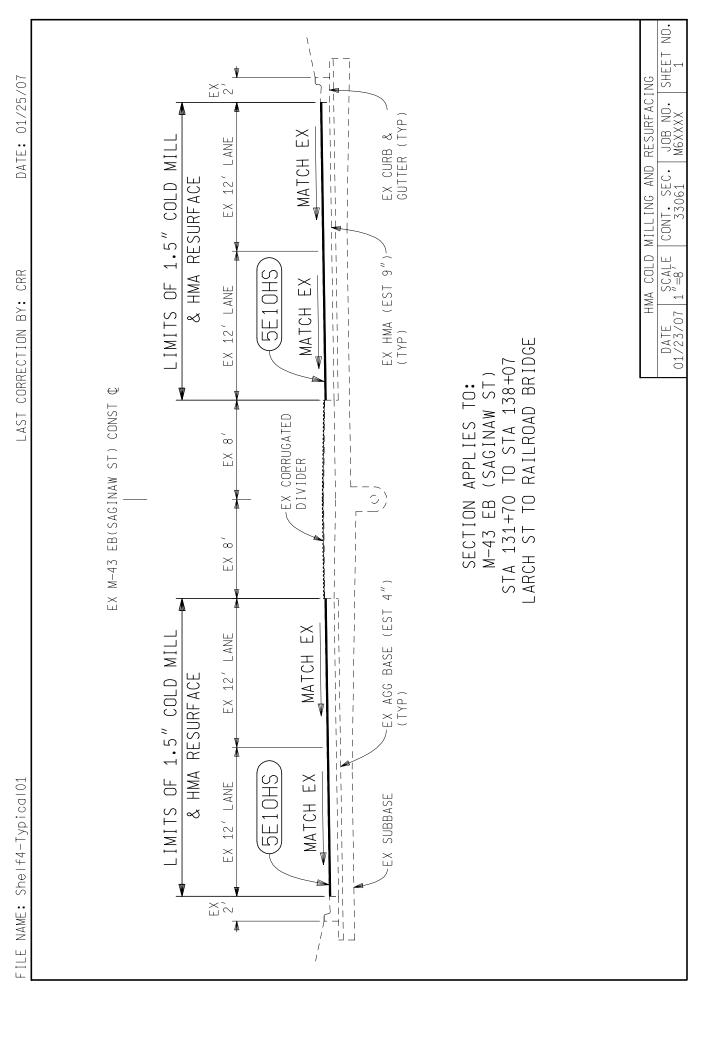
FILE NAME:

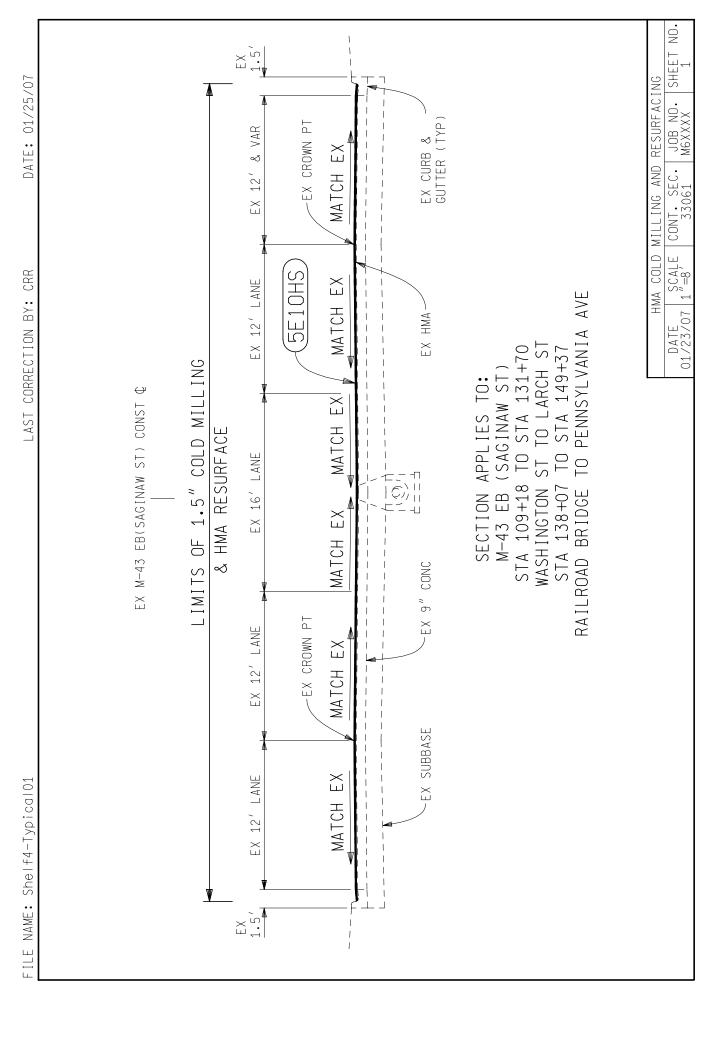
SECTION APPLIES TO: M-43 WB (OAKLAND) STA 379+93 TO POE 387+93 CLIPPERT TO COOLIDGE











DATE: 01/23/07

LAST CORRECTION BY: CRR

FILE NAME: Shelf4-Typical01

			M-43 E	B (Sagina	w St) Patch	n Log			
	LANE 1		LANE 2		LANE 3		JOINTS		Intermediate
STATION	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	Trg	Crg	Saw Cut
11+16			6	12	6	12	24	24	0
11+78					10	12	12	12	12
12+37					8	12	12	12	12
14+30	6	12			6	12	24	24	0
14+89	6	12	6	12	6	12	36	36	0
15+15					6	12	12	12	
15+62			8	12			12	12	
16+31			8	12			12	12	
17+01			6	12			12	12	
17+34			10	12			12	12	
18+39	6	12					12	12	
18+89			6	12			12	12	
19+01					6	12	12	12	
19+32					6	12	12	12	
19+79			8	12	8	12	24	24	
20+15	6	12	6	12	6	12	36		
20+45			6	12	6	12	24	24	
20+65			8	12	8	12	24	24	
21+39	8	12	8	12	8	12	36	36	
21+79			6	12			12	12	
22+40			6	12			12	12	
22+59					6	12	12	12	
22+91	6	12					12	12	
22+99					6	12	12	12	
23+47	6	12	6	12			24	24	
23+58					6	12	12	12	
23+75	6	12	6	12			24		
24+35					6	12	12	12	
24+55			10	12			12	12	
24+70	6	12	6	12			24	24	
24+89			6	12			12	12	
25+08	6	12	6	12			24	24	
25+63	8	12	8	12			24		
25+90			6	12			12	12	
26+40			10	12			12	12	
27+15			6	12			12	12	
27+52					6	12	12	12	
27+67					6	12	12	12	
27+93	6	12	6	12	6	12	36		
28+62	8	12	8	12	10	12	36		
28+80	6	12	6	12			24	24	
29+16	6	12	6	12			24		
29+66	6	12	6	12			24		
29+82	6	12	6	12			24		
30+39			6	12			12	12	
30+64					12	12	12		
31+07			6	12			12	12	
31+23					6	12	12		
31+48					10	12	12	12	12

			M-43 E	B (Sagina	w St) Patch	n Log			
	LANE 1		LANE 2		LANE 3		JOINTS		Intermediate
STATION	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	Trg	Crg	Saw Cut
31+63			6	12	6	12	24	24	0
31+79					6	12	12	12	0
41+99					16	12	12	12	24
32+51	6	12	6	12			24	24	0
32+63					6	12	12	12	0
33+20					10	12	12	12	12
33+36		12					12	12	0
33+95					6	12		12	0
34+22		12					12	12	0
34+31	6	12	6	12	6	12	36	36	
34+43		12					12	12	0
34+51	6	12					12	12	0
34+63			6	12	6	12	24	24	0
34+84			6	12			12	12	0
34+95	6	12	6	12	6	12	36	36	0
							0	0	0
							0	0	0
							0	0	0
							0	0	0

			WB M-43 (	Oakland A	Avenue) Pa	atch Log			
	LANE 1		LANE 2		LANE 3		JOINTS		Intermediate
STATION	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	Trg	Crg	Saw Cut
199+54	6	12					12	12	0
199+62					6	12	12	12	
199+79			6	12	6	12	24	24	
199+90	6	12					12	12	
200+33	6	12	6	12	6	12	36	36	
200+74			6	12			12	12	
201+02	6	12	6	12	6	12	36	36	0
201+07			6	12	6	12	24	24	0
201+70	6	12	6	12	6	12	36	36	0
201+95			6	12	6	12	24	24	0
202+42			6	12	6	12	24	24	
202+68					6	12	12	12	
203+12			6	12	6	12	24	24	
203+86			6	12	6	12	24	24	
204+04	6	12	6	12	6	12	36	36	
204+30	6	12	6	12	6	12	36	36	
204+38					6	12	12	12	
204+45			6	12			12	12	0
204+64	6	12	6	12	6	12	36	36	
204+72			6	12			12	12	
204+96			8	12			12	12	12
205+78	8	12	8	12	6	12	36	36	24
206+29	6	12	6	12	6	12	36	36	
206+40			8	12	8	12	24	24	
206+72			6	12	6	12	24	24	
206+98					6	12	12	12	
207+08			6	12			12		
207+27			6	12			12	12	
207+45	20	12						24	
208+00	20	12						24	
208+30	20	12	20	12	20	12		72	
208+75					12	12	12	12	
209+36	10	12					12		
209+69	10	12					12		
210+61	6	12	6	12			24		
210+87					18	12	12		
211+32			8	12	6	12	24		
212+27	6	12			24	12		48	
212+51	6	12	6	12			24	24	
212+72	6	12	6	12			24		
213+12					6	12	12		
213+19	6	12	6	12			24		
213+35	6	12			6	12	24		
213+50			6	12	6	12	24		
213+60					6	12	12		
213+76			8	12			12	12	
213+89			20	12				24	
214+19					6	12	12	12	0

			WB M-43 (	Oakland A	Avenue) Pa	atch Log			
	LANE 1		LANE 2		LANE 3		JOINTS		Intermediate
STATION	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	Trg	Crg	Saw Cut
214+27			6	12			12	12	0
214+34					6	12	12	12	0
214+60	6	12	6	12	6	12	36	36	0
214+80	6	12	6	12	6	12	36	36	0
214+92	6	12					12	12	0
215+10	8	12	6	12			24	24	12
215+35	6	12					12	12	0
215+43	6	12			6	12	24	24	
215+57					6	12	12	12	
216+07					6	12	12	12	
216+43	6	12	6	12	6	12	36	36	
216+53			6	12			12	12	
216+66	6	12			6	12	24	24	
217+08	6	12	6	12	6	12	36	36	
217+30	8	12	8	12	8	12	36	36	36
217+35					8	12	12	12	
217+47					6	12	12	12	
217+60	6	12					12	12	0
217+96					4	12	12	12	
218+05			10	12			12	12	12
218+39			4	12	4	12	24	24	0
218+52	6	12			6	12	24	24	0
218+65	6	12			6	12	24	24	0
218+81	6	12	6	12	6	12	36	36	0
219+09			6	12	6	12	24	24	0
219+25	6	12	6	12	6	12	36	36	0
219+31	6	12	6	12	6	12	36	36	0
219+51	6	12			6	12	24	24	0
219+79	6	12					12	12	0
219+96					6	12	12	12	
220+16	6	12			6	12	24	24	
221+08	6	12					12	12	
221+40	6	12					12	12	0
221+82	8	12	8	12	8	12	36	36	36
222+05	6	12	6	12	6	12	36	36	0
222+24	6	12	6	12	6	12	36		
222+37	6	12	6	12	6	12	36	36	
222+48	6	12			6	12	24	24	
222+80			6	12	6	12	24		
223+09	6	12			6	12	24		
223+17					6	12	12	12	
223+31	6	12	6	12			24		
223+65			6	12			12		
224+05			6	12			12		
224+24	6	12					12	12	
224+39			6	12			12	12	
224+77	6	12	6	12	6	12	36	36	
224+86					6	12	12	12	
225+36			6	12			12	12	0

			WB M-43 (	Oakland A	Avenue) Pa	atch Log			
	LANE 1		LANE 2		LANE 3		JOINTS		Intermediate
STATION	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	Trg	Crg	Saw Cut
225+69	6	12	6	12	6	12	36	36	0
226+40	6	12					12	12	0
226+87	6	12					12	12	0
227+57			8	12			12	12	12
227+92			6	12			12	12	0
228+08	12	12	12	12	12	12	36	36	36
228+31					6	12	12	12	
228+38			4	12			12	12	
228+48					6	12	12	12	
228+92	8	12	8	12	8	12	36	36	36
229+24	8	12					12		
229+64	6	12					12	12	
229+86					6	12	12	12	
230+01					6	12	12	12	
230+08			6	12	6	12	24	24	
230+17					6	12	12	12	
230+36	6	12					12	12	
230+59	6	12	6	12			24	24	
230+79	Ť		12	12	12	12	24	24	24
230+97	6	12	6	12	6	12	36		
231+04	6	12	6	12	6	12	36	36	
231+17	Ů		6	12		12	12	12	
231+35	6	12	Ť	12	6	12	24		
231+58	Ů				6	12	12	12	
231+63	6	12				12	12	12	
231+74	6	12	6	12	6	12	36	36	
231+90					6	12	12	12	
232+01	6	12	6	12			24	24	
232+11	6	12	6	12	6	12	36	36	
232+35			6	12			12	12	
233+16	6	12	6	12	6	12	36	36	
233+84	6	12		·-			12	12	
234+02	6	12	6	12	6	12	36		
234+14	6	12	6	12			24	24	
234+37				·-	6	12	12		
234+70			6	12	6	12	24		
234+78					6	12	12		
235+12	6	12	6	12	6	12	36		
235+64	6	12			6	12	24		
235+88	6	12	6	12		12	24		
236+14	6	12	6	12	6	12	36		
236+32	6	12	$\vdash$	12	6	12	24		
236+45		12	6	12	6	12	24		
236+54			6	12		12	12		
236+69	6	12	$\vdash$	12	6	12	24		
236+77	6	12				12	12	12	
236+91	6	12	6	12	6	12	36		
237+01	6	12	6	12	6	12	36		
237+01	6	12	6	12	0	12	24		

			WB M-43 (	Oakland A	Avenue) Pa	atch Log			
	LANE 1		LANE 2		LANE 3		JOINTS		Intermediate
STATION	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	Trg	Crg	Saw Cut
237+36	6	12	6	12	6	12	36	36	0
237+68			8	12	6	12	24	24	12
238+03	6	12	6	12	6	12	36	36	0
238+31	6	12	6	12			24	24	0
238+62			6	12			12	12	0
238+89			16	12			12	12	24
238+97	6	12	6	12	6	12	36	36	0
239+03			8	12			12	12	12
239+36	8	12					12	12	12
239+51					6	12	12	12	0
239+76	6	12			6	12	24	24	0
239+88	6	12	6	12			24	24	0
240+02			6	12	6	12	24	24	0
240+10			10	12			12	12	12
240+33	10	12	6	12	6	12	36	36	12
240+56	6	12	6	12	6	12	36	36	0
240+74	6	12	6	12			24	24	0
241+44	8	12	6	12			24	24	12
241+54	6	12	8	12	6	12	36	36	12
241+74	6	12			6	12	24	24	0
242+06	6	12					12	12	0
242+15	6	12	6	12	6	12	36	36	0
242+35			6	12	6	12	24	24	
242+58	6	12			6	12	24	24	0
242+91			6	12			12	12	0
243+13					8	12	12	12	
243+35	6	12	6	12			24	24	
243+49	6	12	6	12	6	12	36	36	0
243+68	6	12	20	12				48	
243+89	6	12	20	12	6	12		72	36
243+97	6	12	6	12			24	24	
244+17			6	12	6	12	24	24	
244+29					6	12	12		
244+77	6	12	6	12	6	12	36	36	
244+94	6	12	6	12	6	12	36	36	
245+13	10	12	10	12			24	24	
245+47	6	12	6	12			24	24	
245+63	6	12			6	12	24	24	
245+87	8	12	6	12	8	12	36	36	
246+03					6	12	12	12	
246+25	6	12					12	12	
246+37	6	12	6	12			24	24	
246+43			6	12	6	12	24	24	
246+80			6	12	6	12	24	24	
247+46			6	12	6	12	24	24	
247+50			6	12			12	12	
247+67					8	12	12	12	
247+71	6	12					12	12	
247+09					10	12	12	12	12

			WB M-43 (	Oakland A	Avenue) Pa	atch Log			
	LANE 1		LANE 2		LANE 3		JOINTS		Intermediate
STATION	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	Trg	Crg	Saw Cut
247+42	6	12					12	12	0
274+00	6	12					12	12	0
275+28					6	12	12	12	0
276+93					6	12	12	12	0
277+24			8	12	8	12	24	24	24
277+41			6	12	6	12	24	24	0
277+64	6	12					12	12	0
278+45	8	12					12	12	12
279+17			8	12	8	12	24	24	24
279+72	10	12	10	12	10	12	36	36	
280+26	6	12			6	12	24	24	0
280+51	16	12					12	12	24
280+61			6	12			12	12	0
280+78			6	12			12	12	0
281+35			6	12			12	12	0
281+90			6	12			12	12	0
282+15	12	12	12	12	12	12	36	36	
282+45					6	12	12	12	
282+58			10	12	10	12	24	24	24
282+72	6	12	6	12	6	12	36	36	
282+98					6	12	12	12	0
283+18			6	12			12	12	0
283+28					6	12	12	12	0
283+48	6	12					12	12	0
284+35			10	12			12	12	12
284+60					6	12	12	12	
284+69	6	12					12	12	0
287+48					6	12	12	12	0

<sup>\*</sup>Note: All dimensions are in feet, unless otherwise specified
\*Lanes are numbered based on the right lane (regardless of the direction of travel) being 'Lane #1'

# MICHIGAN DEPARTMENT OF TRANSPORTATION

### SPECIAL PROVISION FOR MAINTAINING TRAFFIC

LAN:CRR 1 of 5 02-20-07

C.S. 33061 (33042) J.N. MXXXXX

- **a. General -** Traffic shall be maintained according to Sections 103.05, 103.06 and 812 of the 2003 Standard Specifications for Construction, including any Supplemental Specifications, and as specified here.
  - 1. The Contractor shall notify the Engineer a minimum of 3 business days prior to the implementation of any lane closures and major traffic shifts.
  - 2. The Contractor shall coordinate his operations with Contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).
  - 3. MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the Construction Influence Area (CIA). The Maintenance Division of MDOT and/or Contract Maintenance Agency will coordinate their operations with the Engineer to minimize interference to the Contractor. No additional payment will be made to the Contractor for joint use of the traffic control items.
  - 4. The Contractor shall obtain all necessary permits from local governments prior to placing construction signing on local roads. The costs incurred to obtain these permits shall be considered included in the pay item "Minor Traf Devices".
- **b. Construction Influence Area (CIA) -** The CIA shall include the areas within the right-of-way of M-43 from 4,000 feet west of Rosemary Street to 4,000 east of Coolidge Road in Ingham County. The CIA shall also include all cross streets for a distance of 500 feet from M-43 Eastbound (Saginaw Street) and M-43 Westbound (Oakland Avenue).

### c. Traffic Restrictions -

- 1. The Contractor shall maintain a minimum of two lanes of traffic on the four and five lane sections of M-43 Eastbound and a minimum of one lane of traffic on the three lane sections of M-43 Eastbound and Westbound at all times in accordance with the maintaining traffic typicals and notes contained therein.
- 2. No work or lane closures shall be allowed on M-43 during the Memorial Day and Labor Day Holiday weekends, which are defined as beginning at 12:00pm on Friday and ending at 6:00am on the following Tuesday, or as defined by the Engineer. No work or lane closures will be allowed during the 4<sup>th</sup> of July Holiday weekend, which will be defined by the Engineer. In addition, no work or lane closures will be permitted during the East Lansing Art Festival (May 19 May 20), Common Ground

Festival (July 9 – July 15), Michigan State University Welcome Week (August 22 – August 25), and Michigan State University home football games.

- 3. The Contractor shall notify the Engineer at least 24 hours in advance of erection or removal of overlays on existing signs.
- 4. Traffic shall not be maintained on the milled surface. Milled surfaces must be paved to final course each work day and temporary or permanent pavement markings must be completed before opening to traffic.
- 5. Access to all business and residences shall be maintained at all times and work shall be coordinated with the Engineer and with the property owner(s).
- 6. Once work is initiated that includes any lane restrictions, that work shall be continuous until completed.
- 7. A minimum of two miles must exist between lane closures.
- 8. All work conducted between Howard Street and Coolidge Street (POE) shall be done during night time hours. Night time hours will be defined as 7:00 p.m. to 6:00 a.m. Monday through Thursday. The Contractor shall begin at Howard Street and work shall progress easterly to Coolidge Road (POE).
- 9. Cold milling and resurfacing operations shall be done Saturday and Sunday, 7:00 a.m. to 7:00 p.m.
- 10. All concrete pavement repairs must be conducted as weekend work. Weekend work is defined as 7:00 a.m. Saturday to 6:00 a.m. Monday. All concrete pavement repair work except sawing and removal operations are permitted beyond 7:00 p.m. on Saturday. All concrete patches that are removed on Saturday shall be poured and cured in time to re-open to traffic and remove lane closures by Monday at 6:00 a.m.
- 11. Sealing of the concrete joints shall be done Monday through Friday, 9:00 a.m. to 3:00 p.m. or Saturday, 7:00 a.m. to 7:00 p.m.
- 12. The Department has obtained approval from the City of Lansing and City of East Lansing for the work hours specified above which may infringe on the following noise restrictions:
  - -City of Lansing
  - -City of East Lansing

The Contractor must obtain approval from these agencies and the Engineer to work outside the work hours and noise restrictions specified above. Approval from these agencies may take a minimum of weeks to obtain.

### d. Traffic Control Devices -

1. General

- A. All traffic control devices and their usage shall conform to revised Part 6 of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), 2005 edition as revised in 2001, and as specified herein.
- B. The Contractor shall review, adjust, and maintain all traffic control devices on a daily basis, or as directed by the Engineer as specified in the Michigan Department of Transportation's Standard Specification for Construction, 2003 edition.

### 2. Temporary Signs

- A. All diamond-shaped warning signs shall be 48 in. x 48 in., with black legends on reflectorized prismatic orange background unless otherwise noted. All signs shall have a minimum bottom height of 5 feet in uncurbed areas, and 7 feet minimum bottom height in curbed or pedestrian areas.
- B. Signing for a 2-lane closure with no reduction in speed limit on a divided roadway shall be as shown on attached Figure M0820.
- C. Signing for a 3-lane closure with no reduction in speed limit on a divided roadway shall be as shown on attached Figure M0850.
- D. The Contractor shall place the R5-18 "TO PROTECT HIGHWAY WORKERS..." THE R5-18b "INJURE/KILL A WORKER...", and the G20-2 "END ROAD WORK" signs as show in the maintaining traffic typical M0080a.
- E. W20-1 "Road Work Ahead" signs shall be placed prior to the work area on all approaches within the project limits.
- F. All temporary signs that will be in place for more than 14 days shall be mounted on driven posts as specified in typical WZD-100-A.
- G. Distances shown between construction warning, regulatory and guide signs shown on the typicals are approximate and may require field adjustment as directed by the Engineer.
- H. Temporary warning, regulatory, and guide signs not required for a particular lane closure or shift, shall be removed, covered or laid down with the legs removed.
- I. Sign covers used to cover temporary signs are considered to be included in the cost of placing the temporary sign.
- J. All existing signs in conflict with the temporary traffic control shall be covered until the temporary traffic control is removed.
- K. All signs, temporary or permanent, that are damaged as a result of Contractor operations shall be replaced by the Contractor at his/her expense.
- L. All temporary signs shall be constructed with legends and symbols flush to the signs face and not extending beyond the sign borders or edges.
- M. Fabrication, installation and removal of temporary signs to be affixed to existing signs shall be the responsibility of the Contractor and shall be included in the pay item for "Sign Type B, Temp, Prismatic, Furn". Fastening devices such as

- nails, staples, screws or adhesive materials shall not be applied in direct contact with the reflective sheeting.
- N. Portable Changeable Message Signs (PCMS) shall be used. The PCMS are intended to be used to warn traffic of upcoming work and changing traffic control during the life of the project. They shall be installed and operational a minimum of 7 calendar days prior to the start of work. PCMS locations and messages will be as directed by the Engineer.
- O. When flag control is utilized, intermediate flaggers shall be established at intersecting highways and at other traffic generators as directed by the Engineer.

### 3. Channelizng Devices

- A. Channelizing devices used on this project for short-term operations, generally 12 hours or less, shall be 42 inch high retro-reflective plastic channelizing devices according to the Special Provision for 42 inch channelizing devices.
- B. During non-working periods, any work site with uncompleted work shall have advance warning signs (W21-4 Road Work Ahead) and lighted plastic drums with high intensity sheeting from the Department's approved list at specified locations as directed by the Engineer.
- C. Type C Lighted Arrow Panels shall be used where lighted arrow panels are called for in the maintaining traffic typicals and located at the beginning of the taper unless physical limitations restrict its placement. The Lighted Arrow Panel shall then be located as near as possible to the beginning of the taper.
- D. The maximum spacing of channelizing devices shall be as shown below unless otherwise directed by the Engineer. In general the spacing on M-43 shall be:

90 ft in tangents

45 ft in shifts and tapers

25 ft at locations where tighter traffic control is required by the Engineer

E. The Contractor shall be responsible for protecting the work area and must supply the necessary traffic control devices apart from those called for on the plans to delineate the work area from the adjacent property, and will be paid for at unit prices.

### 4. Temporary Pavement Markings

A. Temporary pavement markings shall consist of: Pavt Mrkg, Type R, 4 inch, White, Temp Pavt Mrkg, Type R, 4 inch, Yellow, Temp

### 5. Permanent Pavement Markings

A. The Contractor shall place permanent markings in accordance with Section 811 of the Michigan Department of Transportation's Standard Specification for Construction, 2003 edition, and the most current version of the MDOT

Pavement Marking Typical Plans VIII-900 series and the pavement marking convoy typicals. The Contractor shall notify the Engineer 5 business days prior to placing final markings so the Engineer can assist with layout.

- B. Permanent pavement markings shall consist of the following:

  Pavt Mrkg, Sprayable Thermopl, for skip and lane line markings

  Pavt Mrkg, Ovly Cold Plastic for special markings
- C. The Contractor shall be responsible for logging existing pavement markings.
- **f. Measurement and Payment -** The estimate of quantities for maintaining traffic is based on the sequence of operations described in this special provision.

This estimate also includes a maximum of three (3) Type C lighted arrows (min 48 in. by 96 in.) to be used at any one time.

- 1. Payment for temporary signs shall be made on the maximum square feet of dissimilar sign legends in use at any one time during the project.
- 2. Payment for temporary and permanent pavement markings shall be made by the foot.
- 3. Any additional signing or maintaining traffic devices required to expedite the construction shall be at the Contractor's expense.

# MICHIGAN DEPARTMENT OF TRANSPORTATION COST SUMMARY BY PROPOSAL DATE: 12/07/07

| ROUTE | M-43 | CTR. SEC. | WORK TYPE | 33061 | Miscellaneous | WORK TYPE | LOCATION | From Rosemary Street to Coolidge Road | FED ITEM | | FEDERAL NUMBER | Fed/State | PROPOSAL | PROJECTS | 33061-100215 | 100215A 100215A

DESCRIPTION: 4.53 miles of cold milling, hot mix asphalt resurfacing, concrete pavement restoration, and sidewalk ramp upgrades on M-43 from west of Rosemary Street easterly to Coolidge Road

in the

cities of Lansing and East Lansing, Ingham County.

A 2008 Capital Preventive Maintenance project

Road

SECTION: 0001

LINE NO	Mobilization, Max \$210000.00	ITEM NUMBER 100001	QUANTITY 1.000	UNIT	UNIT PRICE 105,000.00000	EXT. AMT 105,000.00
0020	Erosion Control, Inlet Protection, Fabric Drop	2080006	130.000	E B	100.99000	13,128.70
0030	Dr Structure Cover, Adj, Case 1	4030052	30.000	E B	297.90000	8,937.00
0040	Pavt, Cleaning	5020001	1.000	LS	5,180.00000	5,180.00
0020	Cold Milling HMA Surface	5020002	17,660.000	Ton	5.91000	104,370.60
0900	Pavt Joint and Crack Repr, Det 7	5020020	10,500.000	ъt	4.27000	44,835.00
0070	Pavt Joint and Crack Repr, Det 8	5020021	6,700.000	ъt	6.79000	45,493.00
0800	Hand Patching	5020025	2,400.000	Ton	66.43000	159,432.00
0600	HMA, 5E10, High Stress	5020516	16,000.000	Ton	55.57000	889,120.00
0100	HMA Approach, High Stress	5020520	2,050.000	Ton	79.12000	162,196.00
0110	Cement	6020001	000.06	Ton	59.05000	5,314.50
0120	Joint, Contraction, C2	6020203	240.000	Ft	0.0700.6	2,176.80
0130	Joint, Contraction, Crg	6030020	7,020.000	ъt	5.65000	39,663.00
0140	Joint, Expansion, Erg	6030021	200.000	Ft	9.51000	4,755.00
0150	Joint, Expansion, Esc	6030022	80.000	ъt	9.31000	744.80
0160	Joint, Tied, Trg	6030024	6,720.000	ъt T	3.92000	26,342.40
0170	Lane Tie, Epoxy Anchored	6030030	300.000	Ea	8.27000	2,481.00
0180	Non-Chloride Accelerator	6030035	2,030.000	Gal	0.55000	1,116.50

DATE: 12/07/07

Road

SECTION: 0001

| PROPOSAL | 33061-100215

MICHIGAN DEPARTMENT OF TRANSPORTATION COST SUMMARY BY PROPOSAL

PAGE: 2

LINE NO	ITEM DESCRIPTION	MBER	QUANTITY	UNIT	UNIT PRICE	EXT. AMT
0190	Pavt Repr, Conc, Moving from Repr to Repr	6030038	560.000	E B	7.45000	4,172.00
0500	Pavt Repr, Reinf Conc, 10 inch	6030068 5	5,780.000	Syd	50.24000	290,387.20
0210	Pavt Repr, Rem	6030080 5	5,780.000	Syd	21.06000	121,726.80
0220	Saw Cut, Intermediate	6030110 1	1,920.000	яt	1.93000	3,705.60
0230	_ Joint, Tied, Longit	6037001	200.000	яt	5.50000	1,100.00
0240	_ Pavt Repr, Nonreinf, 10 inch - Special	6037011	100.000	Syd	55.00000	5,500.00
0250	_ Pavt Repr, Rem - Special	6037011	100.000	Syd	28.00000	2,800.00
0560	Sign, Type IIIB	8100181	7.500	Sft	18.38000	137.85
0270	Sign, Type III, Rem	8100202	1.000	Б	39.35000	39.35
0280	Pavt Mrkg, Ovly Cold Plastic, 12 inch, White	8110031	80.000	Ft	4.01000	320.80
0530	Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk	8110035 11	11,200.000	Ft	1.86000	20,832.00
0300	Pavt Mrkg, Ovly Cold Plastic, 12 inch, Cross Hatching, Yellow	8110038	100.000	ъt	3.89000	389.00
0310	Pavt Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar	8110040 4	4,200.000	Ft	7.86000	33,012.00
0320	Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	8110045	23.000	Б	75.53000	1,737.19
0330	Pavt Mrkg, Ovly Cold Plastic, Only	8110050	40.000	면 된	82.36000	3,294.40
0340	Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	8110052	16.000	면 된	71.33000	1,141.28
0320	Pavt Mrkg, Ovly Cold Plastic, School	8110056	31.000	면 된	142.31000	4,411.61
0360	Pavt Mrkg, Ovly Cold Plastic, Thru and Lt Turn Arrow Sym	8110058	4.000	ੲੁਸ	117.25000	469.00
0370	Pavt Mrkg, Ovly Cold Plastic, Thru and Rt Turn Arrow Sym	8110059	5.000	<b>ਲ</b> ਸ	121.49000	607.45
0380	Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym	8110060	11.000	Еа	61.46000	676.06
0380	Pavt Mrkg, Sprayable Thermopl, 4 inch, White	8110083 34	34,500.000	Ft	0.14000	4,830.00
0400	Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	8110084 8	8,000.000	Ft	0.22000	1,760.00
0410	Pavt Mrkg, Sprayable Thermopl, 6 inch, White	8110087	1,100.000	яt	0.34000	374.00

PROPOS		00
TRANSPO	OF.	MICHIGAN DEPARTMENT

DATE: 12/07/07	MICHIGAN DEPARTMENT OF TRANSPORTATION COST SUMMARY BY PROPOSAL
PROPOSAL	
33061-100215	

4,950.00 4,248.15 715.30 1,035.00 1,941.28 139.12 10,355.00 6,555.00 5,572.50 137.50 103.86 334.32 4,960.00 320.00 5,000.00 2,700.00 180.00 4,707.30 612.96 EXT. AMT 14,217.84 UNIT PRICE 0.19000 71.53000 1.11000 485.32000 34.78000 10,355.00000 0.95000 0.99000 22.29000 0.55000 17.31000 2,369.64000 55.72000 3.10000 0.20000 5,000.00000 15.00000 1.00000 283.21000 313.82000 204.32000 1,035.00000 UNIT Sft Sft ËS Ή Ή БĀ LS БĒ E B Б БA E B БA 딥 E B E B Ē QUANTITY 500.000 1.000 4.000 1.000 0000.9 0000.9 1.000 3.000 4.000 5,000.000 6.000 10.000 6,900.000 250.000 250.000 1,600.000 1,600.000 180.000 180.000 15.000 15.000 10.000 ITEM NUMBER 8110090 8120005 8120006 8120030 8120043 8120050 8120090 8120103 8120105 8120110 8120135 8120136 8120153 8127050 8210005 8210020 8250045 8120042 8120102 8120111 8127050 8120091 Barricade, Type III, High Intensity, Lighted, Barricade, Type III, High Intensity, Lighted, Furn NO ITEM DESCRIPTION
Pavt Mrkg, Sprayable Thermopl, 8 inch, White Plastic Drum, High Intensity, Lighted, Furn Plastic Drum, High Intensity, Lighted, Oper Sign, Portable, Changeable Message, Furn 4 inch, Yellow, Temp Pavt Mrkg, Type R, 4 inch, White, Temp Channelizing Device, 42 inch, Furn Oper Sign, Portable, Changeable Message, Temp, Prismatic, Furn Temp, Prismatic, Oper Channelizing Device, 42 inch, Lighted Arrow, Type C, Furn Lighted Arrow, Type C, Oper Road Pavt Mrkg, Type R, Ltg for Night Work Minor Traf Devices Monument Box, Adj Protect Corners Sign, Type B, Sign, Type B, Gate Box, Adj Flag Control SECTION: 0001 Sign Cover Oper LINE 0420 0480 0510 0520 0540 0430 0440 0450 0460 0470 0490 0500 0530 0550 0560 0570 0580 0590 0090 0610 0620 0630

TRAN	t
ΟF	;
DEPARTMENT	
MICHIGAN	

DATE: 12/07/07

AN DEPARTMENT OF TRANSPORTATION COST SUMMARY BY PROPOSAL

PAGE: 4

2,192,601.12 SECTION 0001 TOTAL:

2,192,601.12 PROPOSAL ITEM TOTAL: